SANTA CRUZ BIOTECHNOLOGY, INC.

# EMID2 (W-22): sc-133547

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

## BACKGROUND

EMID2 (EMI domain-containing protein 2), also known as COL26A1 (collagen α-1(XXVI) chain) or EMU2, is a 441 amino acid secreted protein that is hydroxylated on proline residues. EMID2 contains an N-terminal signal peptide, followed by an emilin (EMI) domain, two collagen stretches and a novel C-terminal domain. The EMI domain contains seven conserved cysteines that may mediate dimerization. Existing as two alternatively spliced isoforms, the EMID2 gene is conserved in chimpanzee, canine, bovine, mouse and chicken, and maps to human chromosome 7q22.1. The EMID2 gene contains 13 exons and spans 196 kb. Chromosome 7 is approximately 158 milllion bases long, encodes over 1,000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers, and an elfin appearance.

## REFERENCES


1. Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. Proc. Natl. Acad. Sci. USA 95: 3781-3785.
2. Leimeister, C., et al. 2002. Developmental expression and biochemical characterization of Emu family members. Dev. Biol. 249: 204-218.
3. Sato, K., et al. 2002. Type XXVI collagen, a new member of the collagen family, is specifically expressed in the testis and ovary. J. Biol. Chem. 277: 37678-37684.
4. Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7. Nature 424: 157-164.
5. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608927. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Brezinová, J., et al. 2007. Structural aberrations of chromosome 7 revealed by a combination of molecular cytogenetic techniques in myeloid malignancies. Cancer Genet. Cytogenet. 173: 10-16.


## CHROMOSOMAL LOCATION

Genetic locus: EMID2 (human) mapping to 7q22.1; Emid2 (mouse) mapping to 5 G2.

## SOURCE

EMID2 (W-22) is an affinity purified rabbit polyclonal antibody raised against synthetic EMID2 peptide of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 0.5 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

EMID2 (W-22) is recommended for detection of EMID2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EMID2 siRNA (h): sc-89406, EMID2 siRNA (m): sc-144641, EMID2 shRNA Plasmid (h): sc-89406-SH, EMID2 shRNA Plasmid (m): sc-144641-SH, EMID2 shRNA (h) Lentiviral Particles: sc-89406-V and EMID2 shRNA (m) Lentiviral Particles: sc-144641-V.

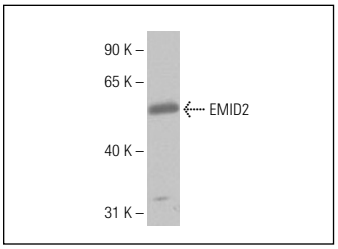
Molecular Weight of (predicted) EMID2: 45 kDa.

Molecular Weight of (observed) EMID2: 55 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA




EMID2 (W-22): sc-133547. Western blot analysis of EMID2 expression in 721 B whole cell lysate.

## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.